

*Contg sub B1* 7 converts the data from the A/D converting section, to an optical signal and transmits the optical signal, or converts a received optical control signal, to an electric signal; and

*A cont* a second signal converting section which has a function of converting an electric signal to an optical signal and vice versa and a function of performing communication and which converts the data from the first signal converting section, to an electric signal or converts the control signal to an optical signal.

11. (New) A measuring apparatus according to claim 4, further comprising a display section which displays a table or a graph showing the electron energy distribution obtained by the calculating section.

12. (New) A measuring apparatus according to claim 10, which is designed to be provided in a processing apparatus for forming film, performing etching or performing annealing, by using plasma generated by application of high-frequency power, and in which the probe is electrically insulated from the chamber of the processing apparatus, in which the plasma region is provided, and is set at a floating potential.

13. (New) A measuring apparatus according to claim 12, wherein the chamber is made of an insulating material.

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